

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-23 are presently active in this case and stand rejected.

In the outstanding Office Action, Claims 1, 5, 8, 11, 12, 16, 19, 22, and 23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hobson et al. (GB Patent No. 2185116, hereinafter “Hobson”); and Claims 2-4, 6, 7, 9, 10, 13-15, 17, 18, 20, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hobson in view of Nekrasov et al. (Soviet Union Patent No. 858429, hereinafter “Nekrasov”).

Initially, as previously requested in the Amendment filed on March 30, 2005, Applicants respectfully request that the references cited in the Information Disclosure Statement filed July 7, 2003 be acknowledged as having been considered in the next Office Action. If necessary, Applicants are in a position to resubmit copies of that IDS and the date-stamped filing receipt, documenting that the IDS was properly filed on that date. Applicants respectfully request the Examiner to inform Applicants’ representatives at the earliest convenient time about the need to resend copies of the IDS filing documents.

In response to the rejection of Claims 1, 5, 8, 11, 12, 16, 19, 22, and 23 under 35 U.S.C. § 102(b), Applicants respectfully submit that Claims 1, 11, and 12 are not anticipated by Hobson because each and every element as set forth in those claims is not found, either expressly or inherently described, in the cited reference. In an anticipation rejection, the identical invention must be shown in as complete detail as is contained in the claim.¹

¹ See MPEP 2131: “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” (Citations omitted) (emphasis added). See also MPEP 2143.03: “All words in a claim must be considered in judging the patentability of that claim against the prior art.”

Briefly recapitulating, Applicant's invention, as recited in Claim 1, relates to a method of distributing blades on a turbomachine rotor, comprising measuring the radial and tangential static moments of the blades, *classifying the blades in pairs* based on the measured radial and tangential static moments, and *mounting the selected pair of blades one by one on the rotor in diametrically opposite positions*. Claims 11 and 12 also recite, among other features, the classification of the blades in pairs and mounting the blades of the classified pairs in diametrically opposite positions.

In Hobson, blades for use in a gas turbine engine are individually moment weighed in each of three attitudes (see, for example, the abstract of Hobson). Subsequently, "on completion of the moment weighing operation, the observed moment weight for each attitude is marked in the respective blades, which are then stored. On withdrawal of a complete set of blades from stores for assembly on a pre balanced disc, the blades moment weights are first entered into a computer, which is programmed to sort the moment weights and issue an instruction regarding the best positions in which blades should be placed on a disc rim with respect to each other so as to provide a balanced assembly" (Hobson, page 2, lines 65-77).

Contrary to the characterization of this reference in the outstanding Office Action, Hobson does not classify the blades in pairs and does not mount the selected pair of blades on the rotor in diametrically opposite positions as recited in Claims 1, 11, and 12. As explained, Hobson relates to a method for assembling blades that comprises measuring the static moments of each blade, classifying the blades depending on the moment weights thereof, and mounting the blades on the rotor with respect to each other so as to provide a balanced assembly.

Therefore, based at least on the foregoing reasons, Hobson fails to teach or suggest every feature recited in Claims 1, 5, 8, 11, 12, 16, 19, 22, and 23, which are patentably distinct over the cited reference. Accordingly, Applicants respectfully submit that Hobson

cannot support a *prima facie* case of anticipation of Claims 1, 5, 8, 11, 12, 16, 19, 22, and 23.

Thus, withdrawal of the outstanding anticipation rejection is respectfully requested.

Turning to the obviousness rejections, Applicants respectfully submit that Hobson and Nekrasov, neither individually nor in any combination thereof, support a *prima facie* case of obviousness of the invention recited in Claims 1, 11, and 12. This is so because, even when combined, these references do not teach or suggest all the claimed features. Claims 2-4, 6, 7, 9, 10, 13-15, 17, 18, 20, and 21 depend directly or indirectly from either Claim 1, Claim 11, or Claim 12, thus incorporating by reference all of the features recited in those claims.

The deficiencies of Hobson have already been discussed above. The outstanding Office Action further acknowledges that Hobson does not teach or disclose a “selection criterion [that] comprises determining for two given blades both radial/axial static moment difference and a tangential static moment difference, and in verifying that the radial/axial static moment differences is not greater than a first determined value.” Nekrasov was cited for assertedly remedying the acknowledged deficiencies of Hobson. However, even if assuming *in arguendo* that Nekrasov teaches the asserted features, it does not remedy the above-noted deficiency of Hobson.

Nekrasov relates to a method for balancing a turbine working wheel that involves the mounting of blade groups taking into account a disk imbalance. According to the abstract of Nekrasov, “wheel balancing is based on the selection of a set of blades whose static moment scatter does not exceed a predetermined value, measurement of the static moment of each set, division of blade sets into two groups and mounting of the individual blades in the disc slots taking into account their static moment. The first blade group is mounted through the slot and the second blade group is mounted through the slot beginning with the second slot of the disc.” Similarly to Hobson, as just summarized, Nekrasov does not classify blades in pairs

and does not mount blades of selected pairs on a rotor in diametrically opposite positions as recited in Claims 1, 11, and 12.

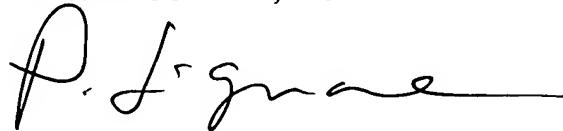
Based at least on the foregoing, Applicants respectfully submit that Hobson and Nekrasov, neither individually nor in any combination, make obvious the invention recited in Claims 1, 11, and 12. In addition, Claims 2-4, 6, 7, 9, 10, 13-15, 17, 18, 20, and 21 should be allowed, among other reasons, as depending either directly or indirectly from Claim 1, Claim 11, or Claim 12, which should be allowed as just explained. As such, withdrawal of the obviousness rejection of Claims 2-4, 6, 7, 9, 10, 13-15, 17, 18, 20, and 21 is respectfully requested.

Consequently, in view of the present Request for Reconsideration, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-23 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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